

The Scottish Naturalist

Volume 107 1995 Part Three

Annual Subscription £35.00

A Journal of Scottish Natural History

THE SCOTTISH NATURALIST

Founded 1871

A Journal of Scottish Natural History

Editorial Committee:

J.A. Gibson

John Hamilton

John C. Smyth

A. Rodger Waterston

THE SCOTTISH NATURAL HISTORY LIBRARY Foremount House, Kilbarchan, Renfrewshire PA10 2EZ

The Scottish Naturalist, now published by the Scottish Natural History Library, is an independent journal primarily devoted to the study of Scottish natural history. It was founded in 1871 by Dr. F. Buchanan White, of Perthshire, and in 1988 completed one hundred years of publication. For a summary of the record of publication, see the inside back cover.

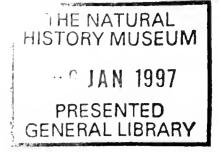
Although the journal's main interests have always centred on the history and distribution of Scottish fauna and flora, it is prepared to publish contributions on the many aspects of Scottish natural science embraced by its title, including Zoology, Botany, Geology, History, Geography, Medicine and the allied sciences, Archaeology, and the Environment.

All papers and notes for publication, or books for review, should be sent to the Editors at the Scottish Natural History Library, Foremount House, Kilbarchan, Renfrewshire PA10 2EZ.

Contributions should be clearly written; whenever possible they should be typed, double-spaced, on one side of the paper, with adequate margins, and should try to conform to the general style and arrangement of papers and notes in the current number of the journal. Maps, diagrams and graphs should be drawn in black ink on white unlined paper. Photographs should be on glossy paper. Proofs of all contributions will be sent to authors and should be returned without delay.

Authors of papers, but not of short notes, will receive thirty reprints in covers free of charge. Additional reprints may be ordered, at cost, when the proofs are returned.

The Scottish Naturalist is usually published three times a year. The standard annual subscription is £35.00, which should be sent to the Editors at the Library address. Members of recognised natural history organisations, however, can receive the Scottish Naturalist at a greatly reduced subscription; for details apply to the Editors.



THE SCOTTISH NATURALIST

Founded 1871

A Journal of Scottish Natural History

With which is incorporated *The Annals of Scottish Natural History* and *The Western Naturalist*

107th Year	1995
CONTENTS	
1995 - Part 3	
Scottish Botanical History Preserved in the National Botanic Gardens, Glasnevin, Dublin By Dr. E. Charles Nelson	137-162
The Occurrence of the Humpback Whale in the Clyde Faunal Area By Dr. J.A. Gibson	163-166
Terrapins in the West of Scotland By Dr. J.A. Gibson	167-169
Short Notes	171-174
Title-Page and List of Contents	175-178

Published by The Scottish Natural History Library

EDITORS

J.A. Gibson John Hamilton John C. Smyth A. Rodger Waterston

All items for publication should be sent to the Editors at The Scottish Natural History Library Foremount House, Kilbarchan, Renfrewshire PA10 2EZ

ISSN 0268-3385

The Scottish Naturalist is the national journal of Scottish natural history. It was founded in 1871 by Dr. F. Buchanan White, of Perthshire, and in 1988 completed one hundred years of publication. The journal exists to provide a medium for the publication of original work on all aspects of Scottish natural science. All contributions, however, represent the personal opinions of the authors concerned, and do not necessarily reflect the views of the Editors of the Scottish Naturalist.

Published by

THE SCOTTISH NATURAL HISTORY LIBRARY

SCOTTISH BOTANICAL HISTORY PRESERVED IN THE NATIONAL BOTANIC GARDENS, GLASNEVIN, DUBLIN

By E. CHARLES NELSON National Botanic Gardens, Glasnevin, Dublin

Read on 30th April 1993 to the Scottish Conference of the Society for the History of Natural History, held in the University of Glasgow.

Introduction

The herbarium of the National Botanic Gardens, Glasnevin (**DBN**), has, like most other herbaria, grown in a random fashion (Nelson, 1980). One of its principal component collections has intimate links with Scotland, and therefore serves as a window on the progress of botany and horticulture in Scotland, especially in the early nineteenth century.

As chance would have it, Professor William Ramsay McNab, Scientific Superintendent of the Royal Botanic Gardens, Glasnevin, died in Dublin in 1889, and his widow, with a young family to support, was left in straitened circumstances. She offered her late husband's herbarium, in the first instance, to the University of Toronto, but the offer was declined and eventually the entire botanical material, except for a remarkable series of *Erica* specimens from the Cape of Good Hope with accompanying manuscript notes, was purchased for the Natural History Section of the National Museum of Ireland (Nelson, 1990). In 1970 this material, with the accumulated specimens of many other botanists, both Irish and foreign, was transferred to the National Botanic Gardens, Glasnevin (Nelson and McCracken, 1987).

William Ramsay McNab (1844-1889) was the grandson of William McNab who served as Curator of the Botanic Garden, Edinburgh (firstly at Leith Walk and later at Inverleith), and before that of the Royal [Botanic] Gardens, Kew. William Ramsay McNab's father was James McNab, who was Superintendent of the Caledonian Horticultural Society's Garden in Edinburgh from 1836 to 1849, when he succeeded his father as Curator of the Royal Botanic Garden, Edinburgh. James McNab was a prominent member of the Botanical Society of Edinburgh, serving as Curator from the Society's foundation, and as President in 1872. James's younger brother, Dr. Gilbert McNab, was an active botanical collector in Scotland and later in Jamaica. Their older sister, Catherine Mary, also had botanical leanings, and was the author of books about the botany of *The Bible* (McNab, 1850, 1850-51).

The contents of the McNab herbarium were not carefully catalogued, as far as is known, before the specimens were amalgamated with the general mélange already in the National Museum, Dublin, during 1890. Thus attempts to assess the scope and historical significance of the McNab family's herbarium are hampered by the time-consuming task of extracting specimens - one by one - from the several different sections of the present-day Glasnevin herbarium. Some work has been done on the series of specimens representing plants cultivated in the Royal Gardens, Kew, and the Edinburgh Botanic Garden, and also on the specimens from Dr. Patrick Neill (Nelson, 1993), James Niven (Nelson and Rourke, 1993), Nathaniel Winch (Nelson, 1987a), and James McNab's North American collections (Nelson and Dore, 1987).

In this paper some attempt is made to indicate the range of specimens representing Scotland's native plants; these materials are incorporated in the British phanerogam section of the Glasnevin herbarium, although a few may have strayed into the foreign section. No catalogue of the Scottish specimens has been attempted, and this paper is largely based on a survey of a small proportion of the specimens, principally those of Scottish endemics and species listed by Perring and Farrell (1983) as rare in the British flora (also see Nelson, 1994).

McNAB FAMILY COLLECTIONS

William McNab (1780-1848)

William McNab was a gardener in the Royal Gardens, Kew, from 1801 until 1810. While working at Kew he prepared a considerable herbarium from plants cultivated in the hothouses and outdoors. Some of these specimens are certainly of taxonomic importance since they represent the only record of new introductions by the Banksian collectors, e.g. Peter Good and Robert Brown from Australia, Archibald Menzies from South America, and William Kerr from China (Good, Brown and Menzies were Scottish). In 1810 William McNab succeeded Thomas Sommerville (who died in March 1810 aged 27) as Curator of the Leith Walk Botanic Garden, Edinburgh, and McNab also gathered a series of specimens from the plants cultivated in the Inverleith Botanic Garden - most are dated 1815 - and from some of the other major Scottish gardens. While the Scottish specimens may not have the enhanced status of those from Kew, they are possibly a valuable yardstick of the progress of the collections in Edinburgh during the early nineteenth century.

William McNab was a more significant figure in Scottish horticulture than in field botany. His publications include pamphlets on *Hints on the Planting and General Treatment of Hardy Evergreens in the Climate of Scotland* (1830), and *A Treatise on the Propagation, Cultivation and General Treatment of Cape Heaths* (1832). The heather pamphlet was illustrated with a hand-coloured engraving by his son, James (Nelson, 1989a). William McNab's interest in *Erica* from southern Africa undoubtedly strengthened his contacts with James Niven of Penicuik, the professional collector who laboured for two lengthy periods at the Cape of Good Hope (Nelson and Rourke, 1993). Niven's substantial personal collection of *Erica* specimens was sold in 1890 to the Royal Botanic Gardens, Kew, but the Glasnevin herbarium holds a small number of other specimens which Niven collected at the Cape of Good Hope, as well as one intact volume of his African field herbarium (*hortus siccus*) (Nelson and Rourke, 1993).

As far as native Scottish plants are concerned, William McNab did gather material in the wild, and a scattering of specimens of historical interest are preserved. For example, on 4th August 1828, on Ben Lawers, William collected Chestnut Rush *Juncus castaneus* and Arctic Mouse-ear Chickweed *Cerastium alpinum*. There is also an extant specimen of *Primula farinosa*, annotated:

...in the Black Moss, about a mile west from Bridge House ... on the left hand side of the road & about half a mile off the road in great abundance 6 July 1823 ...

and a similar one of Purple Saxifrage Saxifraga oppositifolia found:

in great abundance on perpendicular rocks on the west side of the Clyde above Carehouse, about 500 feet above the level of the sea & nearly half way between the two great falls & opposite a moss House in the Bonnington pleasure ground on the east side of the River April 18th 1833.

James McNab (1810-1878)

James McNab, William McNab's son and William Ramsay McNab's father, added significantly to the family herbarium in a variety of ways. It is clear, from a letter written by a fellow botanist Mr. William Christy on 6th November 1835, that James, like many of his contemporaries, was attempting to assemble an entire herbarium of British plants (e.g. Figure 1).



Figure 1

Sheet of specimens from James McNab's herbarium with *Luzula arcuata*, bearing gatherings of Mr. Brand (top row), Dr. Gilbert McNab (middle left and bottom row) and George Don (middle row, right).

George Don specimen annotated as follows:

'Juncus nova species Ben Mc Dowie with my Late father was proposing to call nivalis'.

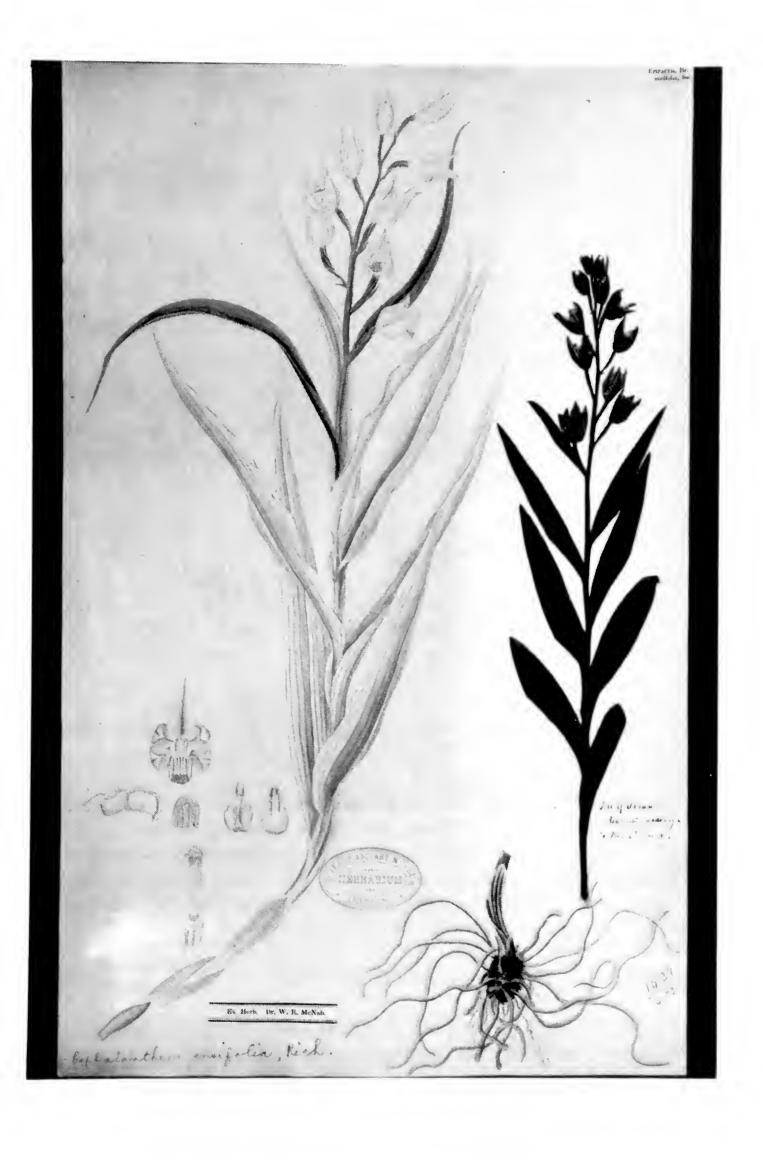
The lower half of the sheet also has watercolour enlargements by James McNab of the fruits of *L. arcuata*.

٠

Figure 2

Cephalanthera longifolia (= C. ensifolia) One of the finest of James McNab's painted herbarium sheets.

The herbarium specimen from Arran was collected on 6th June 1833 by the "Revd. W. Landburgh" [? Rev. David Landsborough].



I will also take the opportunity of troubling you with a list of some of my desiderata for any of which I shall be thankful. As I have no list of yours perhaps you will send me one and I will endeavour to supply you to the utmost of my ability.

Christy bequeathed his collection of about 15,000 specimens to the Botanical Society of Edinburgh; this collection is now in the Royal Botanic Garden, Edinburgh (E).

During 1834 James McNab travelled to the north-eastern part of the United States of America and south-eastern Canada, in company with the Perth nurseryman, Robert Brown, collecting both seeds and herbarium specimens; the North American specimens include several types (Nelson and Dore, 1987; Nelson, 1989b).

James also collected in widely separate localities in his native country, including from such well-trodden botanical sites as Clova; as far as can be judged from a random selection, most of his native specimens predate 1835.

James McNab's painted herbarium

Among the sheets from James McNab's herbarium are about fifty on which he painted detailed portraits and dissections of plants. These range from the Killarney Fern *Trichomanes speciosum* to a series of fine paintings of orchids; whole plants are occasionally represented, but the usual paintings are enlarged dissections (see Figures 2 and 3).

James McNab was an artist of considerable competence. Elsewhere (Nelson, 1989a) I have noted his principal work, published in the prominent botanical periodicals, William Curtis's *Botanical Magazine* and Robert Sweet's *British Flower Garden*, between 1829 and 1841. He also produced at least one plate for James Edward Smith's *English Botany*, the Alpine Butterwort *Pinguicula alpina* (Plate 2747 in *Supplement*, 1832), painted from a specimen which bloomed in the Royal Botanic Garden, Edinburgh, in May 1832. The Alpine Butterwort, like the Cotton-grass from Restennet, is now extinct, exterminated by over-zealous collectors and changes in its habitat. There are ten herbarium sheets of *P. alpina*, covered with 36 specimens, in the herbarium at Glasnevin; the McNab sheet has twenty plants glued to it, including some of the earliest:

Mr. W. Stables 11th Jany 1832. *P. alpina* from the bogs of Auchterflow & Shannon. One of the first specimens picked in Scotland June 1831. This

1995

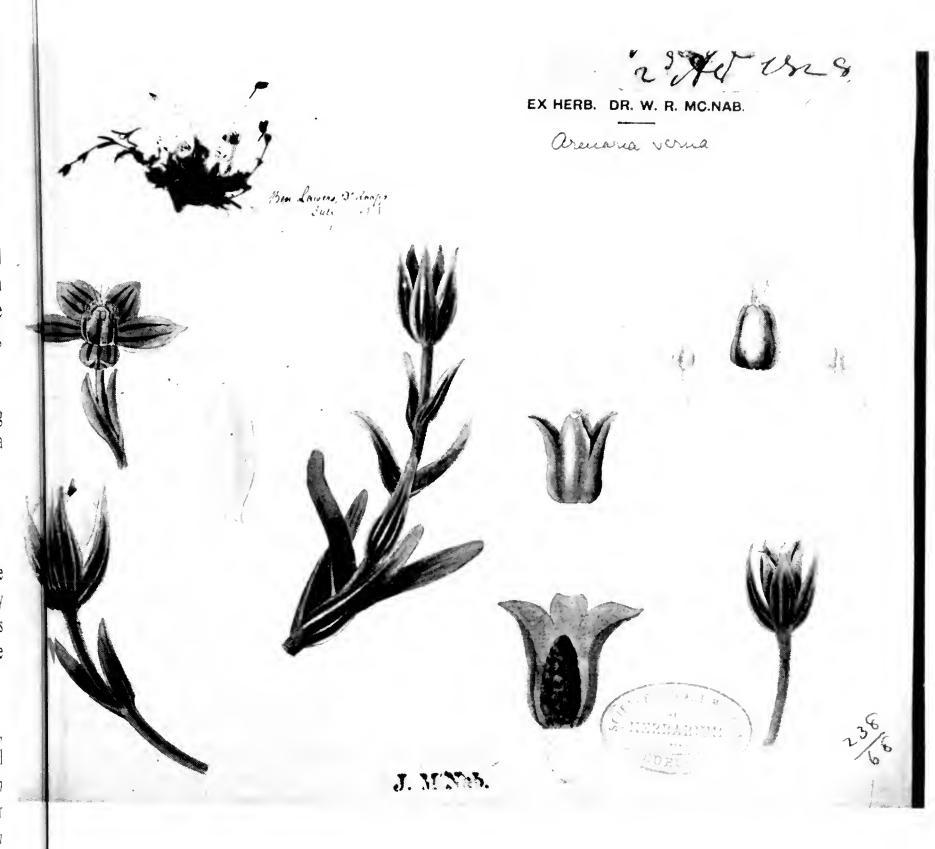


Figure 3

Minuartia rubella (= Arenaria verna)

Detail of the lower half of a sheet showing the enlarged details painted by James McNab in watercolour of the flowers and fruits of *M. rubella*.

The Scottish Naturalist

was distributed for *P. lusitanica* - and first discovered to be *P. alpina* by Mr. H. Watson.

On 19th April 1832 Stables gathered the plants sent to Edinburgh for McNab to paint, and collected further specimens on 21st May 1833. Among the collectors of this extinct species represented in Glasnevin are Rev. George Gordon (1832), James McNab ("picked in the Black Isle, Rosshire Septr 1832, Flowered in the Royal Botanic Garden Edin May 1833"), William Hunter Campbell (May 1834), and J. Robertson (June 1847).

Gilbert McNab (1815-1859)

Gilbert McNab, James' younger brother, studied medicine at the University of Edinburgh, graduating in 1836. Two years later he moved to Jamaica, where among other tasks he assisted James MacFadyen, the Glasgow-born botanist and doctor who had founded a botanic garden and commenced publishing his *Flora of Jamaica* in 1837, with work on the incomplete flora. Gilbert McNab collected plants in Jamaica and other West Indian islands; a series of Jamaican native species is among the foreign specimens now in Glasnevin.

However, Gilbert McNab also made a significant contribution to the native Scottish material in his family's herbarium. He collected, among other species, the Scottish Primrose *Primula scotica*, which had been discovered by Gibb of Inverness at Farr Head near Thurso, and which still inhabits localities in the north of Scotland. In the summer of 1837, Gilbert also travelled through much of western and northern Scotland. He was on Arran in July (where he collected an *Agrostis* on the summit of Goatfell), and in Shetland during August. In Shetland McNab obtained specimens of two important plants, Norwegian Sandwort *Arenaria norvegica* and Shetland Mouse-ear Chickweed *Cerastium nigrescens* (*C. edmondstonii*). These species provide a link with Thomas Edmondston, the precocious Shetlander whose work on the islands' flora was, by any standards, remarkable (cf. Scott and Palmer, 1987).

OTHER COLLECTORS

Thomas Edmondston (1825-1846)

That Thomas Edmondston should be represented in the McNab herbarium is not an accident, because, by all accounts, Dr. Gilbert McNab stimulated the youthful botanist's activities. McNab went to Unst in August 1837, and while "looking over the [eleven-year old] boy's herbarium" noticed a plant he did not

	Ex. Herb. Dr. Litton.
r	Chenaria norvegaca
	EX HERB. EDMONDSTON.
·	HAB. Ballasound
	Co. Indiano
	COLL. Oct. 187,3
	COMM. J.C.

Figure 4

Arenaria norvegica

Label from Dr. Samuel Litton's herbarium (one of the many incorporated into the collections at the National Botanic Gardens, Glasnevin), from a plant from the Shetland Isles ('Baltasound') collected by Thomas Edmondston.

recognise. He gathered material and brought specimens to Edinburgh. One of the plants was quickly identified as *Arenaria norvegica* (Figure 4), and the other as a chickweed which was named *Cerastium latifolia*. A few months later, young Edmondston met William Dawson Hooker (1816-1840), the eldest son of Professor William Hooker, and in November 1837 Edmondston, just twelve years old, began compiling a manuscript flora of Shetland which apparently formed the basis of several papers on the islands' flora, including an appendix to the second edition of William Dawson Hooker's *Notes on Norway* (1839). In the summer of 1838, Edmondston accompanied John Goodsir and Edward Forbes on a botanical excursion to some islands near Unst.

Concerning Arenaria norvegica, there is one well-endowed sheet in the McNab's herbarium to which is attached an undated letter from Professor Robert Graham:

Dear James

The accompanying larger specimen of Gilberts *Arenaria* is the one he asked me to lend to you for figuring for Sowerby. I have written an essential characters, and shall examine it more fully and write a fuller description after I return home. I shall carry some specimens to give away at Liverpool, to Christy, Babington, Forbes, and any other good man & trust I may meet with

Yours very truly

Robt Graham

In McNab's herbarium there are also several other specimens, of varied origins, collected by Thomas Edmondston (dated 23rd October 1840, June 1841, October 1843); Edmonston was only a month past his fifteenth birthday when he collected the first of these for distribution through the Botanical Society of Edinburgh. For a fuller account of the Shetland (McNab, Edmondston) collections, see Nelson (in press, 1995).

Martin Barry (1802-1855)

Dr. Martin Barry is little-known for his botanical collections, although some of these are well-documented and he was elected one of the original councillors of the Botanical Society of Edinburgh. On the other hand, Barry is famous for his work on mammalian embryology, and was the first to report the penetration of the ovum by the sperm. He was elected a Fellow of the Royal Society of London in 1840, and was also a Fellow of the Royal College of Surgeons of Edinburgh. Barry had studied in the University of Edinburgh, from where he graduated in 1833, and thus was one of Professor Robert Graham's pupils.

Barry was a field companion of James McNab. The McNab herbarium contains a uncounted assortment of specimens which Barry gathered between about 1831 and 1835, including the rare Alpine Fox-tail Grass *Alopecurus alpinus* which had been discovered by Robert Brown ('*Jupiter Botanicus*') on Lochnagar in August 1794.

In July 1831 Professor Graham brought his pupils and some friends on an excursion to Forfar, and thence to Clova; one of the principal finds was Alpine Milk-vetch *Astragalus alpinus (Phaca astragalina)*, discovered "on the same day (30th July) [1831]" on cliffs near the head of Glen of the Dole, Clova by William Brand, Dr. Robert Greville and Graham. Brand is usually given sole credit. Martin Barry, then a student, was among the party, and according to Graham (1842):

The unwearied zeal of Mr. Barry has carried him, accompanied by Mr. James Macnab [*sic*], back again to the country from whence he had just returned. They have found abundance of *Phaca astragalina*, in the station on which it was first observed, and *Juncus castaneus* in the course of the White Water, above the falls, in such abundance that 250 specimens were gathered on one little spot.

Specimens which Barry and McNab collected during their private excursion are extant in the McNab herbarium, but while none of the gatherings of Chestnut Rush *Juncus castaneus* is attributed to Barry, one is labelled as follows:

Banks of the White Water 2 miles west from the Sonchus (1st station) on the south side of the Water about 250 specimens were picked on a small piece of ground on the 18th Augst 1831. J. McNab.

The previous day, McNab - and presumably Barry - had gathered the rush in "marshy ground on the Hill above the Glen of the Doll". A specimen of Alpine Foxtail *Alopecurus alpinus* is labelled "S.W. of White Water ... 1831, picked by Mr. Barry". Graham noted that Barry found this grass:

in endless profusion, by a stream, which, from his description, I think must lead from the hill to the south-west of the White Water into Glen Prosen.

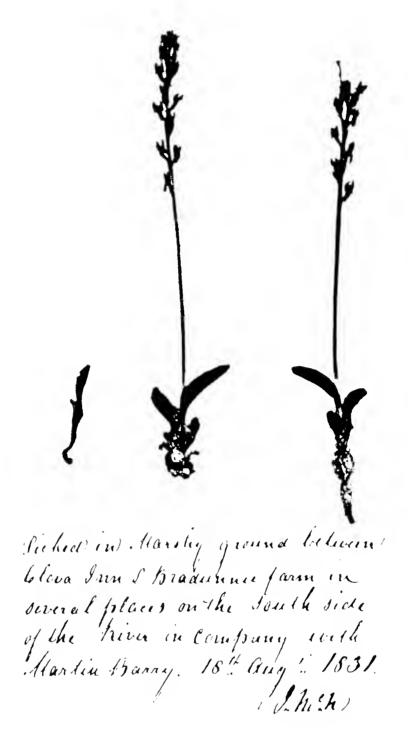


Figure 5

Hammarbya paludosa

One of James McNab's and Martin Barry's collections, annotated by James McNab: "Picked in Marshy ground between Clova Inn & Bradunnie farm in several places on the south side of the River in company with Martin Barry. 18th Augst 1831". Barry's specimens of Bog Orchid *Hammarbya paludosa*, found (according to Graham) "in considerable abundance, and in excellent condition", are labelled:

Picked in Marshy ground between Clova Inn & Bradunnie Farm in several places on the south side of the River in company with Martin Barry 18th Augst 1831. J.McN. (Figure 5).

Barry ranged far from Clova, and was accompanied part of the time by John Mackenzie, gardener at Invercauld, who spotted Tufted Saxifrage Saxifraga cespitosa on Ben Avon, on the west side of Slock More (Graham, 1831).

Robert Brown, Jupiter Botanicus (1773-1858)

Brown's regiment, the Fifeshire Fencibles, was based for over five years in Ireland (Mabberley, 1985; Nelson, 1987). Glasnevin does not possess a substantial number of Brown's Irish specimens, but does have more than one thousand duplicates of Brown's Australian plants (Morley and Powell, 1976), and also a sprinkling of Scottish specimens which date from the late 1790s. Of the native plants represented in Dublin which I have recorded, all are labelled as having been donated by the Trustees of the British Museum; they are duplicates of material now in the Natural History Museum, London (**BM**), which were dispersed during the latter part of last century.

Among the Robert Brown specimens are sheets of Alpine Deer-grass *Scirpus hudsonianum* (now *Trichophorum alpinum*), a small sedge-like plant related to the Bog-Cotton. This was known only from a single locality in Angus, and within two decades of its discovery was extinct, partly due to destruction of its habitat through extraction of peat and marl, but also due to the extraordinary predation of botanists. Brown gathered material in 1791, 1792 and 1793. Two sheets have two specimens attached, labelled:

- 1. First discovered in company with Mr. George Don. August 1791 R. Brown (Figure 6).
- 2. In Restenet Moss Angusshire specimens gathered August 1792 but first observed in August 1791 in company with Mr. Don. R. Brown.
- 3. Moss of Restenet about a mile East from Forfar Angusshire July 1793 Rt Brown. [A duplicate is further annotated "First observed there in company with Mr. G. Don of Forfar August 1791"].

1995

Tost discover ed in complany with Milliongo Chupicat vyor APProvoro " Presented by the Trustees of the British Museum."

Figure 6

Trichophorum alpinum

The label, in the distinctive handwriting of Robert Brown ('Jupiter Botanicus'), reads:

"First discovered in company with Mr George Don, August 1791 R. Brown".

A second specimen in **DBN**, from the same sources, is labelled:

"Eriophorum alpinum Moss of Restenet a mile east from Forfar Angusshire July 1793 R. Brown. First observed there in company with Mr G Don of Forfar August 1791 RB".

Eriophorum alpinum, as the plant was originally named by Linnaeus, is reputed to have become extinct in 1804, and specimens bearing later dates are of doubtful provenance (Ingram and Noltie, 1981). The series of specmens in Glasnevin include the following later material:

- 1. In a moss near Duplin Perthshire from Mr. [Thomas] Somerville 1808 (ex Herb. McNab).
- 2. Moss of Restenet, near Forfar. Mr. Bell, from Dr. McNab, from Sir W. Hooker and he from Drummond.
- 3. Loch of Restennet Forfar, Hooker 1838, Drummond's specimen (ex Herb J.H. Balfour; from Trustees of the British Museum).
- 4. Moss of Restenat Forfar Geo. Don ex Brodie B. Herb. (ex Herb. McNab).

Brown is also represented by a specimen of Small-flowered Catchfly Silene gallica (S. anglica), gathered "halfway between Leuchars & Dundee Ferry ... August 1794".

George Don (1764-1814)

George Don's collections have presented difficulties for many decades, although nowadays his status as one of the most important explorers of Scotland's alpine flora is acknowledged less grudgingly (Roger, 1986). There are a few specimens labelled by Don in Glasnevin, although I cannot be certain from where they came they are not necessarily from the McNab family - as well as some which are labelled by William McNab and may have been taken from cultivated plants; in this latter category are two specimens, one identified as *Juncus nivalis* (*Luzula hyperborea*) from Ben Mee, and one of *Carex rariflora* dated 21st February 1816.

Two other species may be noted in passing. The One-flowered Wintergreen *Moneses uniflora (Pyrola uniflora)* is a beautiful and rare herb; there is a specimen labelled by Don as follows (Figure 7):

First discovered by Mr. Brodie of Brodie on his own Estate in the North. These two specimens he sent me in a Post Letter June 1798.

Only one specimen, however, is attached to the sheet.

Ex. Herb. Dr. W. R. McNab. Pyrola Mulflora Lin. First discovered by Mr Brodic of Brodic on his own Estate in the Morth. These two Specimens he sent me in a Post Lever June 498. 12-1 Dronule Sant 14

Figure 7

Moneses uniflora (= Pyrola uniflora)

Label in hand of George Don, from the McNab family's herbarium.



Figure 8a

Eriocaulon aquaticum (= *E. septangulare*) David Douglas's gathering from the 'Isle of Sky' on 27th March 1822.

Ex. Herb. Dr. W. R. McNab. From the gree of they M. J. Souplase 26 March. USA.2 ويتجيفان والاستام فالمعجة الدوالجا المخاليون

Figure 8b Eriocaulon aquaticum (= E. septangulare) Handwritten label by William McNab

The other plant is the form of Mountain Everlasting or Cat's Paw Antennaria dioica which John Mackay (the predecessor of George Don, William McNab and James McNab as Curator of Edinburgh Royal Botanic Garden) gathered on Skye. Don has labelled the specimen:

Gnaphalium found in Skye by Mr. Mackay, who is inclined to think it a different Species from the Dioica. Folia latiora obovata, utrinque pubescentia argentea.

David Douglas (1799-1834)

In a tragic way, David Douglas and Thomas Edmondston lived remarkable, parallel lives. Both died in tragic circumstances while collecting plants in the Pacific region; Douglas was gored to death in a bull pit in Hawaii, and Edmondston was accidentally shot in the head while re-embarking at Sua Bay in Ecuador on 24th January 1846.

There appears to be no record of any Scottish specimen collected by David Douglas surviving in any British herbarium - none is noted by Kent and Allen (1984: the entry for 'David Douglas' does not relate to this collector). However among the non-Irish specimens in the McNab herbarium in Glasnevin there is a specimen of Pipewort *Eriocaulon aquaticum*, a native plant in western Scotland and in Ireland, from the Isle of Skye collected by "Mr. D. Douglas 27 March 1822" (Figure 8).

From April 1820, Douglas was employed at Glasgow Botanic Gardens, under Stewart Murray, the Curator. That same month, William Jackson Hooker became Regius Professor of Botany in the University of Glasgow, and according to Hooker's own memoir of Douglas (Davies, 1979: 13), Douglas was Hooker's:

favourite companion in some distant excursions to the Highlands and Islands of Scotland where his great activity, undaunted courage, singular abstemiousness and energetic zeal, at once pointed him out as an individual eminently calculated to do himself credit as a scientific traveller.

Conclusions

The McNab family's own expeditions into botanically interesting places within Scotland, as well as their various connections with contemporary Scottish botanists, means that the herbarium of the National Botanic Gardens, Dublin, is rich in material from Scottish habitats gathered by Scottish collectors during the



Figure 9

Trientalis europaea

Roof of a Cottage thatched with heather, Braemar, August 1831

first half of the nineteenth century, with some earlier material, but little of great interest after 1850.

The few examples of the archival value of this material noted here may stimulate others to investigate the herbarium, either for historical information about the collecting of a single taxon, or the work of a particular collector. My personal interest in the McNab herbarium was stimulated by the discovery, in a parcel of unmounted specimens, of a watercolour of that most beautiful alpine shrub *Phyllodoce caerulea* (Nelson, 1977) and this in turn led to a detailed investigation of the history of knowledge of this plant in the Scottish Highlands, and to the recovery of the correct version of its discovery by the Perth nurseryman Robert Brown. I have no doubt that other students of the history of Scottish botany would be rewarded with important information about nineteenth century collectors and their haunts, as well as the habitats of their quarry.

The antique sheets of paper might also yield some unexpected gems. For example, in August 1831 at Braemar, Chickweed Wintergreen *Trientalis europaea* was growing on the roof of a cottage thatched with heather (Figure 9). A trivial morsel, perhaps, to whet the appetite of future investigators?

References

- **Davies, J.** (1979). *Douglas of the Forests. The North American Journals of David Douglas.* Edinburgh: Paul Harris.
- Graham, R. (1842). Description of Several New or Rare Plants which have lately Flowered in the Neighbourhood of Edinburgh, and chiefly at the Royal Botanic Garden. Reprinted from Edinburgh New Philosophical Journal, Volumes 6-32 (1828-42). Edinburgh: Black.
- **Graham, R.** (1831). Notice of plants observed in an excursion made by Dr. Graham with part of his botanical pupils, accompanied by a few friends, in August last. *Edinburgh New Philosophical Journal*, **11**: 372-374.
- Hooker, W.D. (1837). Notes on Norway; or a Brief Journal of a Tour made to the Northern Parts of Norway in...1836. Glasgow: Privately published. Second edition in 1839.
- Ingram, R. and Noltie, H.J. (1981). *The Flora of Angus (Forfar, v.c.90).* Dundee: Dundee Museums and Art Galleries.
- Kent, D.H. and Allen, D.E. (1984). British and Irish Herbaria. London: Botanical Society of the British Isles.
- Mabberley, D.J. (1985). Jupiter Botanicus. Robert Brown of the British Museum. Braunschweig: J. Cramer; and London: British Museum (Natural History).

- MacFadyen, J. (1837). The Flora of Jamaica; a Description of the Plants of that Island arranged according to the Natural Orders. London: Longman & Co.
- McNab, C.M. (1850). Juvenile Conversations on Natural History illustrative of the Wisdom and Goodness of God. Edinburgh: Paton & Ritchie.
- McNab, C.M. (1850-51). Juvenile Conversations on the Botany of The Bible. Parts 1 and 2. Edinburgh: W.P. Kennedy.
- McNab, W. (1830). *Hints on the Planting and General Treatment of Hardy Evergreens in the Climate of Scotland*. Edinburgh: T. Clark.
- McNab, W. (1832). A Treatise on the Propagation, Cultivation and General Treatment of Cape Heaths. Edinburgh: T. Clark.
- Morley, B.D. and Powell, M. (1976). The Robert Brown material in the National Herbarium, Glasnevin, Dublin. *Glasra*, 1: 12-39.
- Nelson, E.C. (1977). The discovery in 1810 and subsequent history of *Phyllodoce caerulea* (L.) Bab. in Scotland. *Western Naturalist*, 6: 45-72.
- Nelson, E.C. (1980). A contribution towards a catalogue of collectors in the foreign phanerogam section of the herbarium, National Botanic Gardens, Glasnevin (DBN). *Glasra*, 4: 31-68.
- Nelson, E.C. (1987a) N.J. Winch's herbarium specimens in the National Botanic Gardens, Dublin. *Naturalist*, **112**: 133-135.
- **Nelson, E.C.** (1987b). Scottish connections in Irish botany and horticulture. *Scottish Naturalist,* 1987: 3-31.
- Nelson, E.C. (1989a). The painted herbarium of James McNab in the National Botanic Gardens, Dublin, and his other botanical art. *Transactions of the Botanical Society of Edinburgh*, **45**: 217-222.
- Nelson, E.C. (1989b). Lobelia cardinalis f. alba (McNab) St. John a correction. Notes from the Royal Botanic Garden Edinburgh, 45: 375-376.
- Nelson, E.C. (1990). William Ramsay McNab's herbarium in the National Botanic Gardens, Glasnevin, Dublin (DBN). 1. Its early history and acquisition. *Glasra*, 1 (N.S.): 1-7.
- Nelson, E.C. (1993). Dr. Patrick Neill's herbarium of Scottish garden plants in the National Botanic Gardens, Glasnevin, Dublin (DBN). Botanical Journal of Scotland, 46: 367-380.
- Nelson, E.C. (1994). Historical data from specimens in the herbarium, National Botanic Gardens, Glasnevin, Dublin (DBN), especially on *Cypripedium calceolus*. B.S.B.I. News, 67: 21-22.
- Nelson, E.C. (in press, 1995). Notes on some Shetland Islands specimens in the National Botanic Gardens, Glasnevin, Dublin, Ireland (DBN). Shetland Naturalist, in press.
- Nelson, E.C. and Dore, W.G. (1987). James McNab's collection from eastern North America, 1834. Notes from the Royal Botanic Garden Edinburgh, 44: 343-349.

- Nelson, E.C. and McCracken, E.M. (1987). The Brightest Jewel: a History of the National Botanic Gardens, Glasnevin, Dublin. Kilkenny: Boethius Press.
- Nelson, E.C. and Rourke, J.P. (1993). James Niven (1776-1827), a Scottish botanical collector at the Cape of Good Hope: his *hortus siccus* at the National Botanic Gardens, Glasnevin, Dublin (DBN), and the Royal Botanic Gardens, Kew (K). Kew Bulletin, 48: 663-682.
- Perring, F.H. and Farrell, L. (1983). British Red Data Books. 1.Vascular Plants. Lincoln: Royal Society for the Protection of Nature.
- Roger, J.G. (1986). George Don, 1764-1814. Scottish Naturalist, 1986: 97-108.
- Scott, W. and Palmer, R. (1987). The Flowering Plants and Ferns of the Shetland Islands. Lerwick: Shetland Times.
- Smith, J.E. (1832). English Botany; or Coloured Figures of British Plants. Supplement (Plate 2747). London: C.E. Sowerby.

Dr. E. Charles Nelson, National Botanic Gardens, Glasnevin, DUBLIN 9.

THE OCCURRENCE OF THE HUMPBACK WHALE IN THE CLYDE FAUNAL AREA

By J.A. GIBSON Clyde Area Recorder, Mammal Society of the British Isles

Introduction

At the risk of repeating the obvious, it seems to be necessary to re-emphasise yet again that many species of cetaceans, including some of the larger whales, have long been known as regular visitors to Clyde waters; frequently seen all over the Clyde sea area nearly to the head of the great sea-lochs, and often as far up the river as Port Glasgow, with occasional occurrences beyond.

Even in the days when pollution of the river was infinitely greater than it is now, cetaceans were recorded far up the river (Gibson, 1976 and 1995), and it is probably worth recalling some of these early records. The 1905 Dunbartonshire stranding of the Lesser Rorqual *Balaenoptera acutorostrata* was at Dumbarton Rock (Gibson, 1989), there are many records of Bottle-nosed Whales *Hyperoodon ampullatus*, including one as far up the river as Renfrew in 1906 (*Glasgow Herald*, 20th February 1914), and there are even older records of Killers *Orcinus orca* "said to have been seen" in the White Cart river, near Renfrew (Young, 1837).

Nowadays, individuals and groups can regularly be seen at sea, and also from several favoured vantage points on the shore, including around Kilbrannan Sound, the Clyde islands, and land overlooking the great sea-lochs and the Clyde estuary. There have also been numerous strandings, with records extending back well over two hundred years (Allan, 1792).

Some sixteen species of cetaceans have been recorded from the Clyde area, at least six species of which have been regular visitors at one time or other, but although the Clyde status of marine mammals has long been well established (Gibson, 1976), every so often popular imagination seems to become excited by some particular occurrence, leading to wildly exaggerated claims. During the past half-century of recording Clyde marine mammals I have witnessed several examples of this, the most recent of which occurred earlier this year.

Humpback Whale in Clyde Estuary

From around mid-December 1994 to the end of March 1995 a Humpback Whale *Megaptera novaeangliae* regularly frequented the Clyde estuary. Earlier, what was almost certainly the same animal had apparently been seen off Loch Ryan and the south-east of Arran in the lower reaches of Clyde. In upper Clyde it was most frequently reported from Skelmorlie to beyond Ardmore, off Port Glasgow, even to Dumbarton Rock, and in the lower parts of Loch Long and the Gare Loch. To begin with it appeared to be keeping company with at least one, and possibly two, Lesser Rorquals, a species markedly increasing in Clyde waters within recent years (Gibson, 1995), but by early February it appeared to be solitary.

The whale, estimated to be about 25-30 feet in length, was regularly seen quite close inshore, mainly off the Renfrewshire coastline, where it gave splendid views, often breaching, and for many weeks was seen by large numbers of interested members of the general public from convenient viewpoints. A great many photographs were taken, some printed by local and national newspapers and others deposited in the Scottish Natural History Library for reference purposes, and even some short television documentary films were made.

Spurious Claims

A Humpback Whale was admittedly an unusual species to occur in the Clyde, and it was also a little unusual (although no more than that) for members of the public to be able to see a large whale in the Clyde so easily and so close inshore for such an extended period, but sightings of whales are by no means rare in the Clyde, even off the Renfrewshire coastline (Gibson and Anderson, 1972; Gibson, 1976), and the matter should simply have ended with reporting the interesting record of a Humpback.

Unfortunately, no attempt whatever was apparently made by the media to contact the official recorder or the author of the standard work on Clyde marine mammals to ask for an accurate report, and wildly exaggerated claims were made about the 'rarity' of Clyde whales. Newspapers and radio items, and also some television reports, repeated hopelessly inaccurate statements: about the great rarity of a whale in the Clyde, apparently the first "Renfrewshire whale" and even, unbelievably, "probably the first-ever record of a Clyde whale". What was possibly even worse, attempts to 'explain' the occurrence of a whale in the Clyde then began to appear, with references to supposed changes in other Clyde fauna, where no 'explanation' was ever required by anyone who should have known (or should have enquired about) the real status of Clyde cetaceans.

Shortly after most of these nonsensical reports began to appear, I contacted local newspapers, radio stations and television to point out the real position, i.e. that although the occurrence of the Humpback itself was unusual and was well worth reporting, cetaceans of several species were very well known in the Clyde, including many previous occurrences observed from the Renfrewshire shore, with several Renfrewshire strandings, one Bottle-nosed Whale actually inside Victoria Harbour, Greenock (plus several records of whales inside other Clyde harbours), and most notable of all, the famous White Whale *Delphinapterus leucas* which spent most of the late summer of 1964 off Gourock, where it was frequently seen by virtually every member of the Royal Gourock Yacht Club. Furthermore, all this detailed information had been carefully reported in easily available standard natural history journals.

Typically, this approach usually produced a long embarrassed silence, followed by a distinct lack of enthusiasm for publishing the correct information ("its news value has possibly now passed"); it appeared, alas, that the true facts lacked the 'sensation' element so beloved by the media. It did, however, bring about a fairly immediate and welcome halt to the more sensational and inaccurate reporting. The 'news item' died a pretty sudden death, although, as far as I am aware, no media attempt was ever made to set the record straight.

Previous Clyde Records

This well-observed and very authentic record of a Humpback Whale is an addition to the previously published list of Clyde marine mammals (Gibson, 1976), and, to the best of my knowledge, is only the second or third record for the Clyde area. On 30th May 1992 I had a brief sighting of what was almost certainly a Humpback Whale in the upper part of Kilbrannan Sound, off Skipness, and on 12th June 1993 for over an hour I obtained excellent views of one Humpback Whale, again in the Kilbrannan Sound, off Carradale. The next day I had a brief glimpse of what was presumably the same whale, travelling south down Kilbrannan Sound, but there was no sign of it during the following week. All these Humpback records, plus several additional interesting records of other cetaceans, will be included in my forthcoming supplementary paper on Clyde marine mammals.

Over the past decade, Humpback Whales have occasionally been reported off the outer Scottish islands, which is very much a new development, so a look-out should certainly be kept for further sightings. Needless to say, I shall be very grateful to hear of any additional Clyde occurrences.

Summary

A Humpback Whale, apparently only the second or third occurrence for Clyde, frequented the Clyde estuary from December 1994 to March 1995. Although this was a most interesting record, most unfortunately it got exaggerated out of all proportion by the media, with wildly inaccurate statements about the rarity of whales in the Clyde area. It is hoped that any future occurrences of Clyde cetaceans which excite the public imagination will be reported more responsibly, but past experience does not make me very confident. For some unknown reason, 'whales' always seem to be exciting news to each new generation of local journalists.

References

Allan, J. (1792). Parish of Row, County of Dumbarton. *Statistical Account of Scotland*, 4: 405-409.

Anon. (1914). Whales in the Clyde. Glasgow Herald, 20th February 1914.

- Gibson, J.A. (1976). The marine mammals of the Clyde faunal area. Western Naturalist, 5: 3-39.
- Gibson, J.A. (1989). The first record of the Lesser Rorqual in Dunbartonshire: evidence from an early photograph. *Scottish Naturalist*, **101**: 97-100.

Gibson, J.A. (1995). Increase of the Lesser Rorqual in the Clyde faunal area. Scottish Naturalist, 107: 71-73.

- Gibson, J.A. and Anderson, J. (1972). The mammals of Renfrewshire. *Western Naturalist*, 1: 69-108.
- Young, A.R. (1837). Mammalia. In: Town and Parishes of Paisley. *New Statistical Account of Scotland*, No. 14: 162.

Dr. J.A. Gibson, Scottish Natural History Library, Foremount House, KILBARCHAN, Renfrewshire PA10 2EZ. By J.A. GIBSON South-West Scotland Representative, Herpetofauna Groups of Britain and Ireland

Imported Specimens

During the craze for 'Turtles' which appeared on television and in children's books and comic-papers, and which probably reached its peak some 10-15 years ago, demands for these as pets by children became widespread, and very large numbers of young terrapins were imported and sold by pet-shops throughout the country. From enquiries I made from pet-shop proprietors in the West of Scotland, the species most commonly imported and sold was the Red-eared Terrapin *Trachemys scripta*, although some other species were also sold, in much smaller numbers. National records also show that the Red-eared Terrapin was the species most widely imported and sold throughout Britain.

Later Release

Unfortunately, according to information supplied by pet-shop proprietors, the terrapins were actually somewhat unexciting as pets, so children rapidly began to lose interest. Morerover, mothers often complained that the terrapins were very 'smelly', so sales steadily fell away after the initial surge over the first few years. Some parents came back to pet-shops to return the terrapins, and some enquiries were made to Glasgow Zoo to attempt to find alternative homes for the unwanted pets, but in all probability the majority of unwanted terrapins were apparently simply released, presumably into local ponds and lochs, or were otherwise just turned out to survive as best they could on their own devices.

West of Scotland Occurrences

From the mid-1980s onwards I collected a good many instances of the occurrence of terrapins from various parts of the West of Scotland. All told, I now have records of some forty animals (all specimens I was able to inspect being Redeared Terrapins), mostly dead, from eleven 10-kilometre squares in the Clyde faunal area, as follows: NR 88 NS 28 NS 17 47 57 NS 46 56 66 76 NS 43 NS 32

These records are virtually all from the neighbourhood of large towns -Glasgow, Airdrie, Paisley, Kilmarnock, Ayr, Clydebank, Helensburgh, Dunoon and Lochgilphead - which is more or less precisely what one would expect.

Doubtless these forty-odd records from eleven 10-km squares represent simply the tip of the iceberg, and there are presumably many more records unreported. The main bulk of these records came from the mid-1980s to the early 1990s, and during the past five years I have come across very few new records, which presumably means that the brief craze for keeping terrapins as pets has now passed. Relatively few terrapins are now available from local pet-shops, since responsible proprietors, concerned about the future welfare of the creatures being abandoned, have long since ceased to import terrapins in any quantity, and most of those which were previously released have probably now died.

Elsewhere in British Isles

Similar accounts of terrapins being found in the wild have been reported from many parts of the British Isles, and indeed a National Terrapin Project is now being set up to collate all records; already well over one hundred sites are on record. So far there is apparently no evidence of feral breeding, but Red-eared Terrapins are fairly long-lived, so evidence may taken some time to emerge; the position can also become confused if younger terrapins are later released into the same site. Adult Red-eared Terrapins can eventually grow to nearly one foot in length, but the largest specimen I have recorded in the West of Scotland was barely half this size.

Summary

I would not regard this short history of released terrapins occurring in various parts of the West of Scotland as being of any great importance, and certainly not a significant part of Clyde herpetofauna. A good many other species of non-native herpetofauna have arrived in the West of Scotland over the years, usually accidental imports (see Gibson, 1976 and 1982). The deliberately imported and later released terrapins do not quite come into this category, but in view of the forthcoming establishment of the National Terrapin Project (c/o the Zoological Society of London) it seems a sensible idea to place on record the known facts about the West of Scotland occurrences. I do not at present know of any sites in the West of Scotland where Red-eared Terrapins are living free - all past records have been of isolated dead or dying specimens - but I shall be extremely grateful to hear of any evidence to this effect, or, indeed, to be informed of any additional isolated records.

References

- Gibson, J.A. (1976). The reptiles and amphibians of the Clyde area. Western Naturalist, 5: 53-66.
- Gibson, J.A. (1982). The freshwater and terrestrial fauna of the Clyde sea area. Part V: Reptiles and amphibians of the Clyde faunal area. *Glasgow Naturalist*, 20: 211-227.

Dr. J.A. Gibson, Scottish Natural History Library, Foremount House, KILBARCHAN, Renfrewshire PA10 2EZ.

Short Notes

SHORT NOTES

INCREASE OF GREY SQUIRRELS IN LOWLAND CLYDE

As a follow-up to our 1992 paper on the spread of the Grey Squirrel Sciurus carolinensis south of the River Clyde (Scottish Naturalist, 104: 123-125), it is worth reporting that the anticipated widespread increase in population and distribution has now certainly taken place. Grey Squirrels are now widely distributed throughout lowland Clyde, with records from virtually every 10-km square in Renfrewshire, north Ayrshire and north Lanarkshire, plus new records arriving all the time.

The squirrels are clearly thriving well, and locally in Renfrewshire are now present in numbers far greater than the Red Squirrel *Sciurus vulgaris* ever achieved, even in its heyday of the 1930s and early 1940s. Clearly the Grey Squirrel south of the River Clyde is now here to stay.

J.A. Gibson and I.W. Grant

GREY SQUIRREL ON THE ISLAND OF BUTE

On 17th September 1994, while motoring south from Rothesay to Kilchattan Bay on the Island of Bute, my wife and I had a brief but close view of a single Grey Squirrel *Sciurus carolinensis* running across the main road (A844) towards Torr Wood (NS 097593). This was an unexpected sighting, since I was aware that there were no previous records of the species having been seen on the island (see Gibson 1970, and supplementary papers).

Although Grey Squirrels can swim well, it seems unlikely that the animal reached Bute from the Argyll mainland by this means. In the absence of any further evidence forthcoming, the assumption must be of a captive pet squirrel which had escaped or had been deliberately released into the wild.

Gibson, J.A. (1970). The mammals of the Island of Bute. *Transactions of the Buteshire Natural History Society*, **18**: 5-29.

John Mitchell

RECENT RECORDS OF RED SQUIRRELS IN AYRSHIRE

The Red Squirrel *Sciurus vulgaris* was formerly fairly well distributed throughout many wooded areas of Ayrshire, but by the time of the publication of the *Atlas of Ayrshire Vertebrates* (1984) the Red Squirrel had almost entirely disappeared, with virtually the only recent positive records coming from woodland near Ballochmyle (NS 52). This was certainly not caused by competition from the Grey Squirrel *Sciurus carolinensis*, which at that time was completely absent from Ayrshire.

During the summers of 1994 and 1995, however, we were fortunate enough to see several Red Squirrels in separate areas of woodland (exact localities not disclosed) south of Ayr, where there now seem to be small but apparently thriving populations. The sites are incorporated within the 10-km squares NS 21 and NS 31, where Red Squirrel populations were known to exist in past years.

This was very much a surprise discovery, since no records of squirrels in this area were known to Dr. Gibson, in his capacity as Clyde Area Recorder for the Mammal Society, during the past ten years, although it is, of course, notoriously easy to overlook the presence of squirrels, unless they are very active. Since the likelihood of any local introduction is exceptionally small, the assumption must be that a small resident population has always been present, possibly with a very tenuous hold, but has been overlooked in the past.

Unfortunately, with the recent relentless advance of the Grey Squirrel south of the Clyde, the future of the Red Squirrels in this part of Ayrshire would appear to be very precarious.

J.A. Gibson and M.M. Baxter

INLAND BREEDING OF THE LESSER BLACK-BACKED AND HERRING GULLS IN COWAL, ARGYLL

At the side of Loch Tarsan reservoir, in the Cowal hills some two miles east of Loch Striven, there is a well-known colony of Common Gulls *Larus canus* which we have regularly monitored for many years; numbers have been very variable, but have recently reached some sixty breeding pairs, and possibly more. Despite its close proximity to the road, the colony seems to be little disturbed.

Short Notes

From at least 1992 onwards, however, there have also been two or three pairs of breeding Lesser Black-backed Gulls *Larus fuscus*, and last year (1994) one pair of Herring Gulls *Larus argentatus* was nesting. We carefully watched one Herring Gull onto its nest, and checked that it was sitting on eggs. This year (1995) there were several pairs of Lesser Black-backed Gulls nesting and also a few Herring Gulls present, but we could detect no Herring Gull nest. We hope to be able to keep this site under observation.

These breeding records of the Lesser Black-backed and Herring Gulls are in the 10-km square NS 08, which is an addition to the *Atlas of Cowal Vertebrates* (1980).

M.M. Baxter and J.A. Gibson

EIDERS ON FRESH WATER, IN LOCH ECK, COWAL

On 30th April 1995 I saw two male Eiders *Somateria mollissima* near the south end of Loch Eck, the large freshwater loch north of the Holy Loch in the Cowal district of Argyll. The birds were fairly widely separated, about eighty yards apart. The nearest point of the sea is some three miles distant.

In my experience of over sixty years of bird-watching in the Clyde area, records of Eiders on fresh water are very uncommon, so I feel this occurrence is worth reporting. I did once previously see an Eider on Loch Eck, some fifty years ago, but unfortunately do not now have the exact details. Baxter and Rintoul, in their *Birds of Scotland* (1953), say that Eiders breed inland at freshwater lochs on some of the outer Scottish islands, and there are some isolated records of Eiders with young having been seen on inland lochs in the Clyde area (e.g. *Scottish Naturalist*, 1937: 166). Needless to say, I shall be very grateful to hear of any similar Clyde records.

J.A. Gibson

BASKING SHARK STRANDED ON COLONSAY

On 28th September 1994 I found a dead Basking Shark *Cetorhinus maximus* on the rocks at the south part of Kiloran Bay, at the north-west of the Island of Colonsay, Inner Hebrides. This was somewhat late in the year, but the fish seemed

1995

reasonably fresh, although it had obviously been much damaged by gulls. It measured some fifteen feet long, and was lying on the edge of the rocks, head to the shore, with nearly one-third of its length out of the sea at low tide. There was no sign of the carcase two days later.

The Basking Shark used to be a fairly regular visitor in small numbers to the sea around Colonsay during the main summer months, but I have seen very few during the past few years, so this discovery was somewhat unexpected and I feel it is well worth placing on record.

Andrew Murray

SEA STICKLEBACK IN THE RIVER FYNE, ARGYLL

On 5th June 1994 I captured a specimen of the Sea or Fifteen-spined Stickleback *Spinachia spinachia* in the River Fyne at the head of Loch Fyne, Argyll. The fish seemed perfectly healthy, and swam away vigorously when released.

Although the Sea Stickleback is generally regarded as a marine fish and is almost entirely marine in habitat, it does sometimes occur where the salinity is lowered, e.g. at the mouths of rivers and occasionally, at high tide, quite far up some rivers. There are earlier published records from Argyll; Gibson and Colville (1973 and 1975) recorded the Sea Stickleback from the Machrihanish and Carradale burns in Kintyre.

This Sea Stickleback in the River Fyne, however, was caught in the river several hundred yards from the river's entrance to the sea-loch, so it may be that the Sea Stickleback occasionally ventures further from the sea than has previously been assumed. Additional information about any other records would be welcome.

Gibson, J.A. and Colville, D. (1973). The freshwater fishes of Kintyre. Western Naturalist, 2: 75-83.

Gibson, J.A. and Colville D. (1975). *An Atlas of Kintyre Vertebrates*. Campbeltown: Kintyre Antiquarian and Natural History Society.

J. Lawson

THE SCOTTISH NATURALIST

Volume 107

....

1995

List of Contents,	1995

107th Year	1995
Part One	
The New Statistical Account of Scotland, 1834-45: Correct Publication Dates of the Parish Accounts By Dr. J.A. Gibson	3-52
The Marine Fauna of the St. Kilda Archipelago By Mr. J.R. Ellis, Mr. P.S. Cadman, Dr. S.B. Piertney and Mr. D.L. Geiger	53-70
Increase of the Lesser Rorqual in the Clyde Faunal Area By Dr. J.A. Gibson	71-73
Notes on the Bumble-bees of the Cumbrae Islands By Dr. J.A. Gibson	75-81
Part Two	
The Romans and Strathclyde: The Road System 6. The Nith Valley Roads Part 1: The Roman System By Mr. Frank Newall and Dr. William Lonie	85-115
The Romans and Strathclyde: The Road System 7. The Nith Valley Roads Part 2: Possible Roman Roads of the Carsphairn Massif By Mr. Frank Newall and Dr. William Lonie	117-131
Strange Beasts on the Bonny Banks: An Update By Mr. John Mitchell	133-134

Part Three

Scottish Botanical History Preserved in the	
National Botanic Gardens, Glasnevin, Dublin	
By Dr. E. Charles Nelson	137-162
The Occurrence of the Humpback Whale in the Clyde Faunal Area	
By Dr. J.A. Gibson	163-166
Terrapins in the West of Scotland	
By Dr. J.A. Gibson	167-169
Short Notes	
Increase of Grey Squirrels in Lowland Clyde	
Dr. J.A. Gibson and Mr. I.W. Grant	171
Grey Squirrel on the Island of Bute	
Mr. John Mitchell	171
Recent Records of Red Squirrels in Ayrshire	
Dr. J.A. Gibson and Dr. M.M. Baxter	172
Inland Breeding of the Lesser Black-backed and	
Herring Gulls in Cowal, Argyll	
Dr. M.M. Baxter and Dr. J.A. Gibson	172-173
Eiders on Fresh Water, in Loch Eck, Cowal	
Dr. J.A. Gibson	173
Basking Shark stranded on Colonsay	
Mr. Andrew Murray	173-174
Sea Stickleback in the River Fyne, Argyll	
Mr. J. Lawson	174

THE SCOTTISH NATURALIST

Founded 1871

A Journal of Scottish Natural History

With which is incorporated *The Annals of Scottish Natural History* and *The Western Naturalist*

Record of Publication

The Scottish Naturalist and Journal of the Perthshire Society of Natural Science 1871

> The Scottish Naturalist 1872-1891

The Annals of Scottish Natural History 1892-1911

The Scottish Naturalist 1912-1939, 1948-1957, 1961-1964

> The Western Naturalist 1972-1982

> The Scottish Naturalist 1983-date

Published by The Scottish Natural History Library

THE SCOTTISH NATURALIST

Founded 1871

A Journal of Scottish Natural History

With which is incorporated *The Annals of Scottish Natural History* and *The Western Naturalist*

107th Year	1995
CONTENTS	
1995 - Part 3	
Scottish Botanical History Preserved in the National Botanic Gardens, Glasnevin, Dublin By Dr. E. Charles Nelson	137-162
The Occurrence of the Humpback Whale in the Clyde Faunal Area By Dr. J.A. Gibson	163-166
Terrapins in the West of Scotland By Dr. J.A. Gibson	167-169
Short Notes	171-174
Title-Page and List of Contents	175-178

Published by The Scottish Natural History Library